Ronald D. Cappellini

Deputy Director of Production Engineering

Tobyhanna Army Depot

Mr. Cappellini presently serves as the Deputy Director of Production Engineering. This organization is composed of 12 divisions and employs a staff of 250 engineers and technical personnel. Major missions of the directorate are the design and integration of electronics systems, engineering services required to maintain and repair electronic equipment, development of computer programs used to test electronic equipment, information management systems, facilities modernization and industrial process management.

Mr. Cappellini is also an adjunct professor of Electrical Engineering. He has taught courses at the Luzerne County Community College, Nanticoke, Pa. since 1988.

In 1991 Mr. Cappellini accepted a position as Chief of the Project Design and Development Division. In this capacity he was responsible for 4 branches and a staff of 130 personnel. This design and development organization was composed of electrical and mechanical engineers. Their primary mission was system integration. This entailed designing, manufacturing, assembling, installing and fielding communications and data processing systems into mobile tactical or fixed site configurations used by the military.

In 1990 Mr. Cappellini was promoted to Chief of the Integrated Logistics Support Office. The ILS Office was responsible for new system development, modernization, marketing, proposal development, and total quality management (TQM).

In August of 1984 he was promoted to Section Chief responsible for Test Program Development. Computer programs developed by personnel in this organization were run on Automatic Test Equipment (ATE). These test programs are used to determine if electronic equipment is functional and if not to diagnose the failed component.

In January 1983 Mr. Cappellini accepted a position at Tobyhanna Army Depot as a Project Engineer. He was responsible for the design and integration of mobile tactical communication shelters for the Army, Air Force and NASA. These systems contained a variety of communications electronics and data processing equipment.

In May 1979 Mr. Cappellini was awarded a Bachelor of Science degree in Electrical Engineering from Wilkes University, Wilkes-Barre, Pa. Upon graduation he accepted a position as a Design and Development Engineer for Goodyear Aerospace Corporation, Akron, Ohio. While at Goodyear he assumed the responsibilities for electronic circuit design, system analysis, design and integration. A major accomplishment was working on the design and development of the computer used as the guidance and control system for the Pershing II missile.

Mr. Cappellini resides in Old Forge, Pa. with his wife Ann Marie. He has three children, Ronald Jr., U.S. Navy Pilot,

Tobyhanna Army Depot Mission and Capabilities Partnering with Industry

Presented by:

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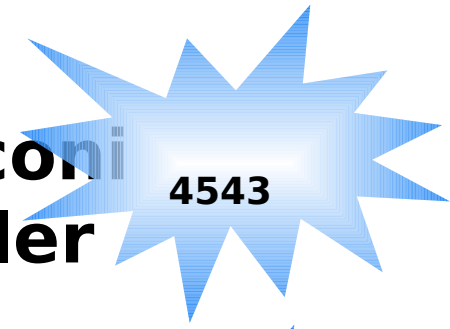
Outline

- Teaming with Industry
- Missions
- Capabilities
  - Engineering
  - Overhaul / Repair
  - System Integration
  - Force Projection
- Summary

Teaming with Industry

- **TYAD actively partners with industry to provide high quality, cost-effective, full service maintenance, fabrication and logistics support for advanced electronics systems.**
- **Partnerships and Direct Sales**
  - **Raytheon**
  - **Canadian Marconi**
  - **Lockheed Martin**
  - **Lear Siegler**
  - **EPS**
  - **ARINC**
  - **Titan**
  - **CSC**
  - **TRW**
  - **Signal Corp**
  - **Areojet**

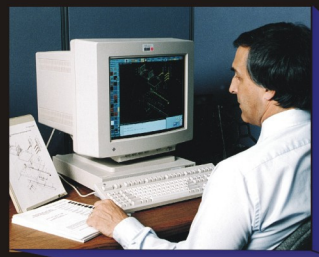


Teaming with Industry

- **10 US Code**
  - **2474 - Center for Industrial and Technical Excellence (CITE)**
    - **Secretary of Army designated TYAD as the CITE fo communications-electronics, radar, avionics, and missile guidance and control**
  - **4543 - Direct Sales**
  - **2208(j) - Subcontracting**

MISSIONS

REPAIR/
OVERHAUL



ENGINEERING
SERVICES

SYSTEMS
INTEGRATION

HIGH TECH
TRAINING

FABRICATION/
MANUFACTURING

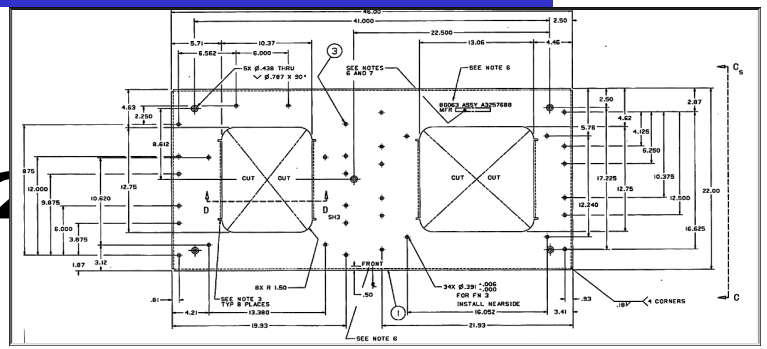
FORCE
PROJECTION

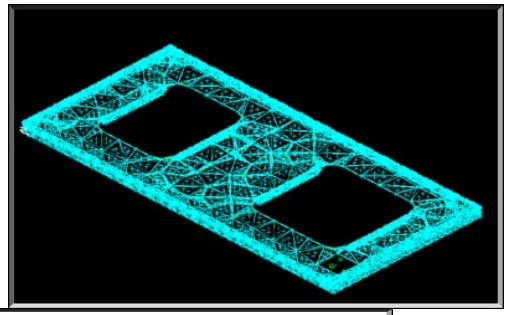
Engineering Services

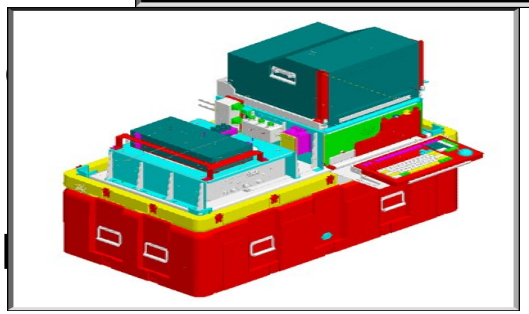
- Maintenance engineering
- Testing methods development and analysis
- Support to PMs and industry developing new systems
- System design, manufacturing and integration
- Configuration management of

Computer Aided Engineering

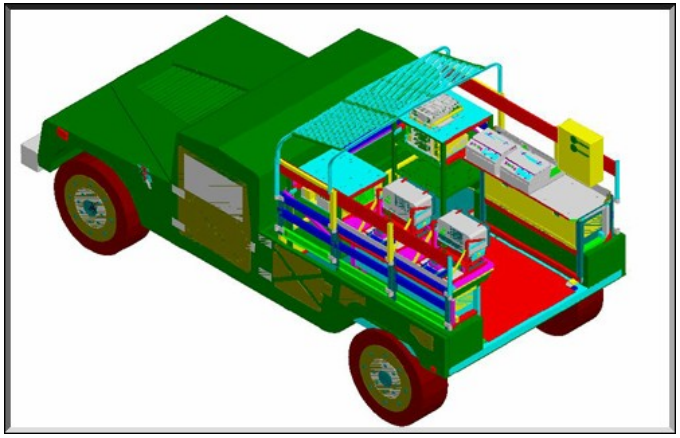
- System software
  - PRO-ENGINEER 2000 i2
  - CADDS 5
  - AUTOCAD 2000 i
  - COSMOS
- 3-D solid parametric modeling
- 3-D project visualization
- Numerical code (NC) generati
- Finite element analysis
- Mechanical & electrical drawi



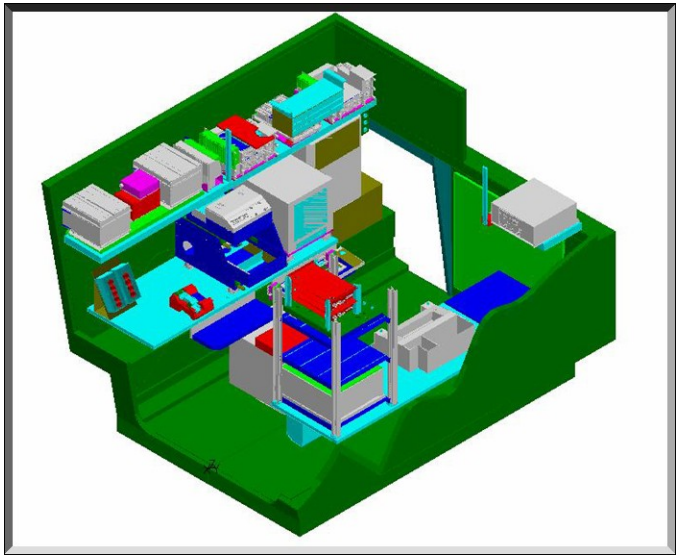




Computer Aided Engineering



Models To Reality



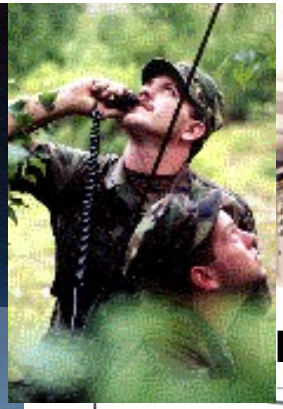
ECOM Bottom Line: THE WARFIGHTE

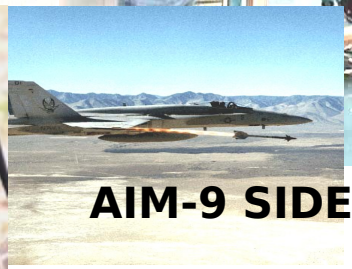
TOBYHANNA ARMY DEPOT EXCELLENCE IN ELECTRONICS

Overhaul Commodities

- Radio
- Communications
- SATCOM
- Electro-Optics Night Vision
- Missile (Guidance & Control Electronics)
  - Maverick
  - Sparrow
  - Sidewinder
- Ground Support Equipment

Overhaul Commodities





ECOM Bottom Line: THE WARFIGHTE

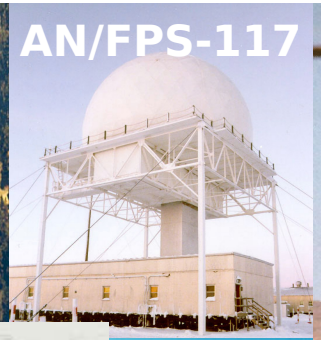
TOBYHANNA
ARMY DEPOT EXCELLENCE IN ELECTRONICS

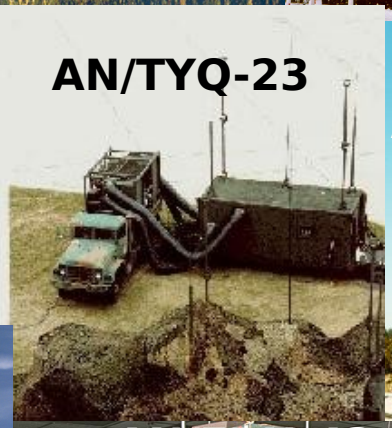
Overhaul Commodities

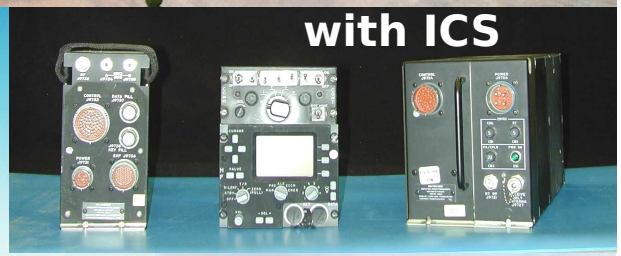
- Avionics
- Air Traffic Control
- Surveillance
- Command, Control and Computers
- Intelligence Electronic Warfare
- Range Threat

ECOM Bottom Line: THE WARFIGHTE

Overhaul Commodities







ECOM Bottom Line: THE WARFIGHTE

TOBYHANNA ARMY DEPOT EXCELLENCE IN ELECTRONICS

Systems Integration

- **Prototype development**
- **Modification / downsizing**
- **Production**
- **Technical Data Package development**
- **System testing**
- **Fielding support**

Systems Integration

Presses

Turning

Milling

Tactical End Item Repair Facility

Waterjet Cutting

ECOM Bottom Line: THE WARFIGHTE

TOBYHANNA ARMY DEPOT EXCELLENCE IN ELECTRONICS

Systems Integration Firefinder

- **Member of IPT with Raytheon and SAMD**
  - **Designed, manufactured, and installed upgrade kits**
    - **AN/TPQ-36 - Turkey, Egypt, and Portugal**
    - **AN/TPQ-37 - Singapore**
- **Teaming with Raytheon**
  - **Designed and manufactured AN/TPQ-47 Prime Power Group - 2208(j)**
  - **AN/TPQ-37 upgrade kits**
    - **Direct sale (4543) - Greece**

Systems Integration Firefinder

AN/TPQ - 37 (V)6

AN/TPQ - 36 (V)8

AN/TPQ - 47 Prime Power Group

ECOM Bottom Line: THE WARFIGHTE

TOBYHANNA ARMY DEPOT EXCELLENCE IN ELECTRONICS

Systems Integration: Fielding Support
Balkans Digitization Initiative (BDI)

- **Collaborative Effort – TYAD with**
  - **PEO, C3T; QUALCOMM; Kontron Mobile Computing; TRW**
- **Enhanced Information System (EIS)**
  - **Vehicle tracking via GPS**
  - **E-mail capability**
  - **Satellite based transmit / receive secure data**
  - **Video displayed maps / geographic locations**
  - **FBCB2 Situational awareness**
- **Future initiative – “Blue Force Tracking”**
  - **Adds Raytheon and COMTECH Mobile Datacomm**

Systems Integration: Fielding Support
Balkans Digitization Initiative (BDI)

- **Fielded**
  - **U.S. Army Europe (USAREUR) - 654**
    - **Bosnia, Kosovo, Southern European Task Force SETAF)**
  - **Maintenance support**

ECOM Bottom Line: THE WARFIGHTE

Systems Integration: Fielding Support Brigade Combat Team

- **Light Armored Vehicle (LAV) experiment, Ft. Lewis WA**
  - **Canadian LAV and German Fauch**
    - **CECOM RDEC / TYAD team**
    - **Design, manufacture, integration, and test**
    - **33 total systems**
    - **All designs validated on CAE prior manufactu**
  - **Successfully completed by Oct 00**
  - **Future opportunities - 2nd and 6th Brigades**

Systems Integration: Fielding Support
Brigade Combat Team (BCT)

ECOM Bottom Line: THE WARFIGHTE

TOBYHANNA ARMY DEPOT EXCELLENCE IN ELECTRONICS

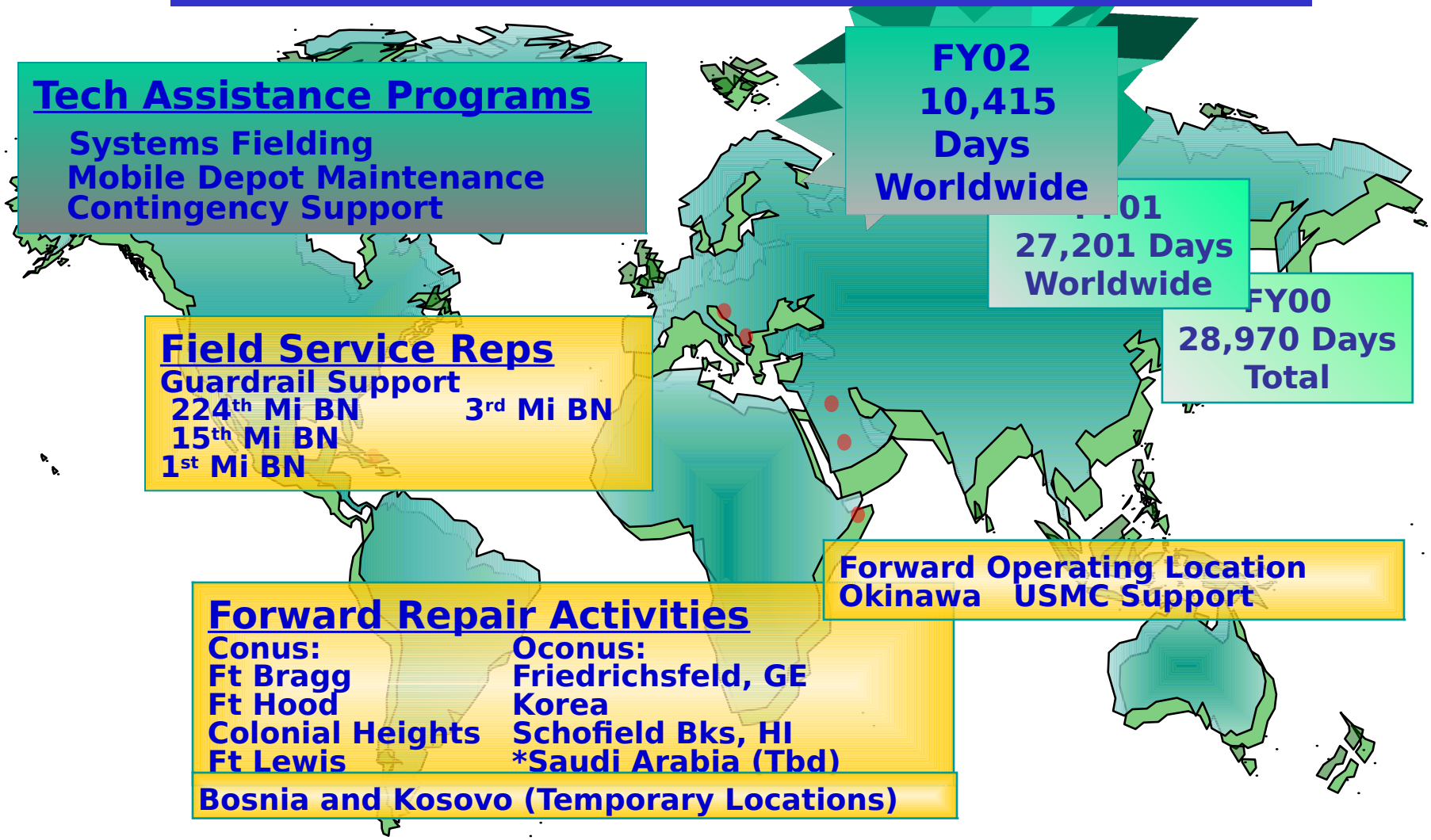
Force Projection

Forward Repair Activities

ECOM Bottom Line: THE WARFIGHTE

TOBYHANNA ARMY DEPOT EXCELLENCE IN ELECTRONICS

Force Projection



Tech Assistance Programs

Systems Fielding
Mobile Depot Maintenance
Contingency Support

FY02
10,415
Days
Worldwide

01
27,201 Days
Worldwide

FY00
28,970 Days
Total

Field Service Reps

Guardrail Support
224th Mi BN
3rd Mi BN
15th Mi BN
1st Mi BN

Forward Operating Location
Okinawa USMC Support

Forward Repair Activities

Conus:	Oconus:
Ft Bragg	Friedrichsfeld, GE
Ft Hood	Korea
Colonial Heights	Schofield Bks, HI
Ft Lewis	*Saudi Arabia (Tbd)

Bosnia and Kosovo (Temporary Locations)

ECOM Bottom Line: THE WARFIGHTE

TOBYHANNA ARMY DEPOT EXCELLENCE IN ELECTRONICS

Summary

- **TYAD offers industry**
  - **Repair and overhaul capability of all electronic equipment**
  - **Engineering functions include design, manufacturing, repair, and overhaul**
  - **Manufacturing and system integration functions**
  - **Field installation teams**
    - **Mobile Depot Maintenance**
    - **Technical Assistance**
    - **Installations**
  - **Force Projection Presence**

ECOM's Bottom Line: THE WARFIGHTE

BOTTOM LINE . . .

the Warfighter